

Attorney Docket No. 5566-1002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

PROTO-TECHNICS, INC.

Mail Stop PCT

Application No. PCT/US2005/028500

Attention: US/RO

Filed August 12, 2005

TURBULENCE BURNER WITH VORTEX STRUCTURES

STATEMENT UNDER ARTICLE 19(1) (RULE 46.4)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 12, 2006

Claim 9 is amended to include reference signs and to include the limitation that "when fuel is burned, a naturally aspirated unregulated, turbulent forced air effect develops".

Claim 12 is amended to clarify that an air/fuel mixture is combusted in a cylinder that is open at both ends to address the lack of clarity objection noted in section V. paragraph 2) of the Written Opinion.

Applicant's invention relates to air flow into a burner by natural aspiration.

The International Search Report and Written Opinion cite two documents, FR 2,291,453 and GB 1,300,145.

As set forth in Section V. paragraph 3) of the Written Opinion, FR '453 does not disclose this feature. Although GB

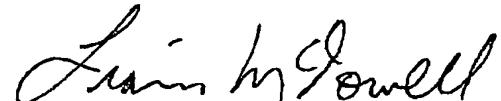
Attorney Docket No. 5566-1002  
International Appln. No. PCT/US2005/028500

'145 appears to suggest this feature, nevertheless, the Written Opinion sets forth that based on the structure of these devices, they could not be combined to lead to Applicant's claimed invention.

Claim 9 was the only claim that did not include this feature. As claim 9 is amended to include this feature, Applicant respectfully suggests that the invention as now claimed meets the requirements of novelty, inventive step, and industrial applicability.

Respectfully submitted,

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LM/msd

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/US2005/028500

**A. CLASSIFICATION OF SUBJECT MATTER**  
F23D14/64 F23D11/40

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
F23D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 291 453 A (PORTA TEST MANUFACTURING LTD) 11 June 1976 (1976-06-11) A page 2, line 32 – page 4, line 32; figures 3-6	9
A	GB 1 300 145 A (DFC CORPORATION) 20 December 1972 (1972-12-20) A page 2, line 16 – page 3, line 56; figures 1-3	1,9,12
A	US 2004/146826 A1 (POE ROGER L [US] ET AL) 29 July 2004 (2004-07-29) A paragraph [0045] – paragraph [0059]; figures 2-10	1,9,12
		-/-

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search  24 March 2006	Date of mailing of the International search report  04/04/2006
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Theis, G